



Ideas 12 NX Installation Changes and Configuration Tips

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I-deas 12 Installation Changes



- ▶ Points to be covered:
- ▶ License installation & configuration
- ▶ Installation Prerequisites
- ▶ Different types of ideas code installs
- ▶ Team setup using the TDI Wizard
- ▶ Resource lock server setup
- ▶ Command line installation
- ▶ License Borrowing
- ▶ Memory settings



I-deas 12 License Configuration



- ▶ License installation and configuration
 - ▶ The license for Ideas 12 is configured so that it can be a shared license service between multiple UGS products. Ideas and NX4 can use the same license service and license file. This is possible because the resource lock for Ideas has been removed from the license service and uses its own service.
 - ▶ This will give us two basic options for ideas licensing.
 - ▶ License server only installation
 - ▶ Full installation



I-deas 12 License Configuration



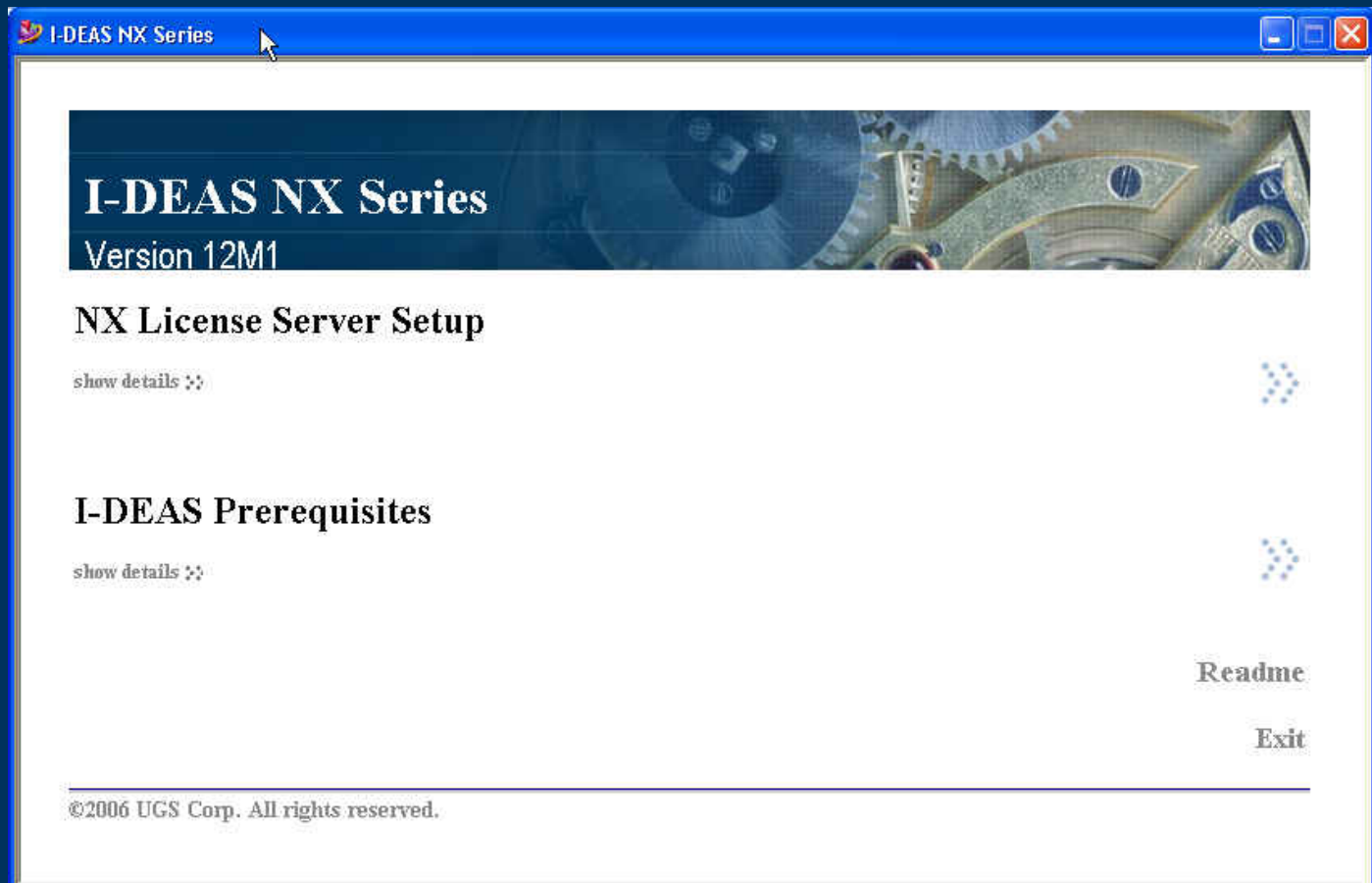
- ▶ The license server only installation can be installed to a server that is dedicated to serving licenses only or to a server that will be serving the license, the resource lock service and the team data installation.
- ▶ All three of these features could be installed on different machines but it is best to keep them connected so that one part of them does not fail and cause problems with the others.



I-deas 12 License Configuration



- The License server setup can be installed from the initial installation window.

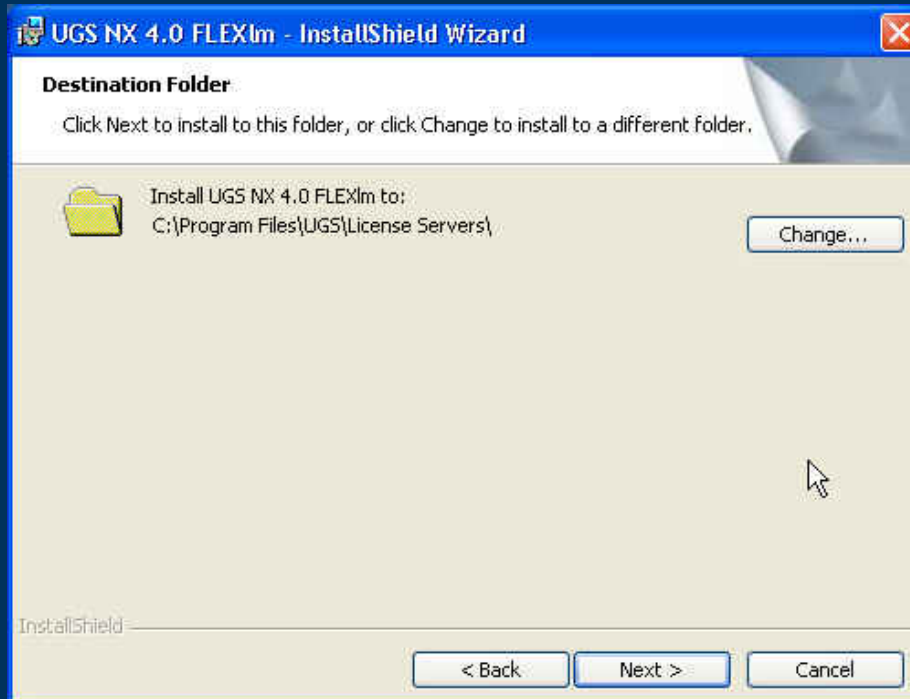




I-deas 12 License Configuration



- ▶ It will default to the Program Files directory. This can be changed to a different location if you have a specific location for license installs on the server.
- ▶ Select the change button to define a new location.

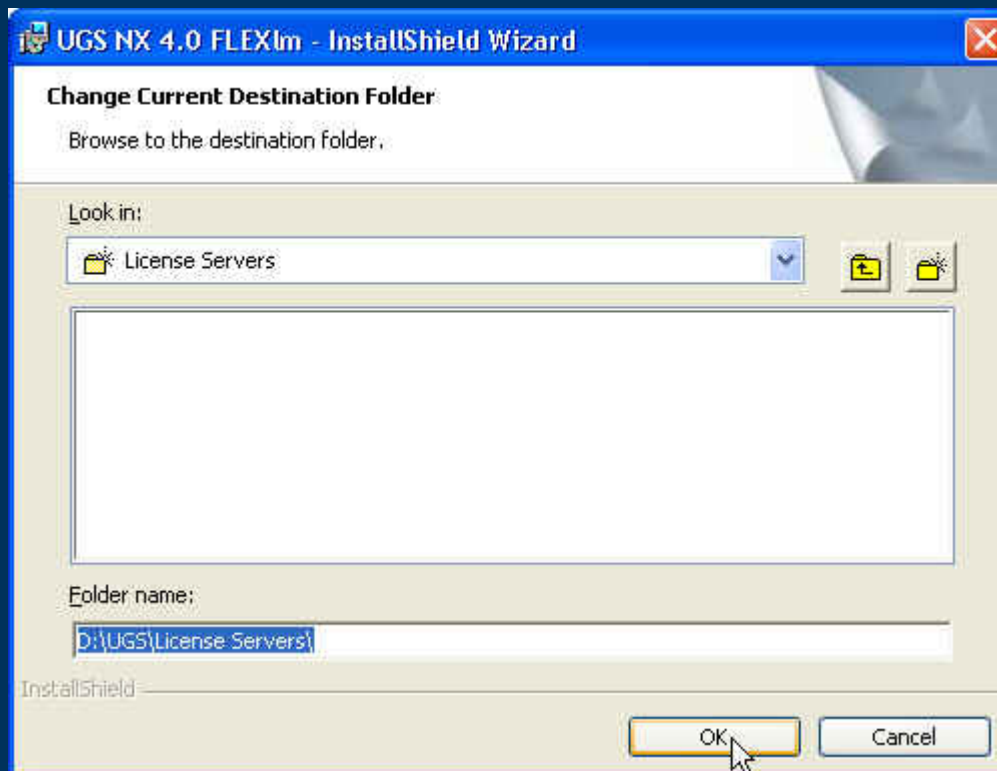




I-deas 12 License Configuration



- ▶ The example below shows the license server being installed into the D:\UGS directory. This was done to group all of my UGS products to one location.

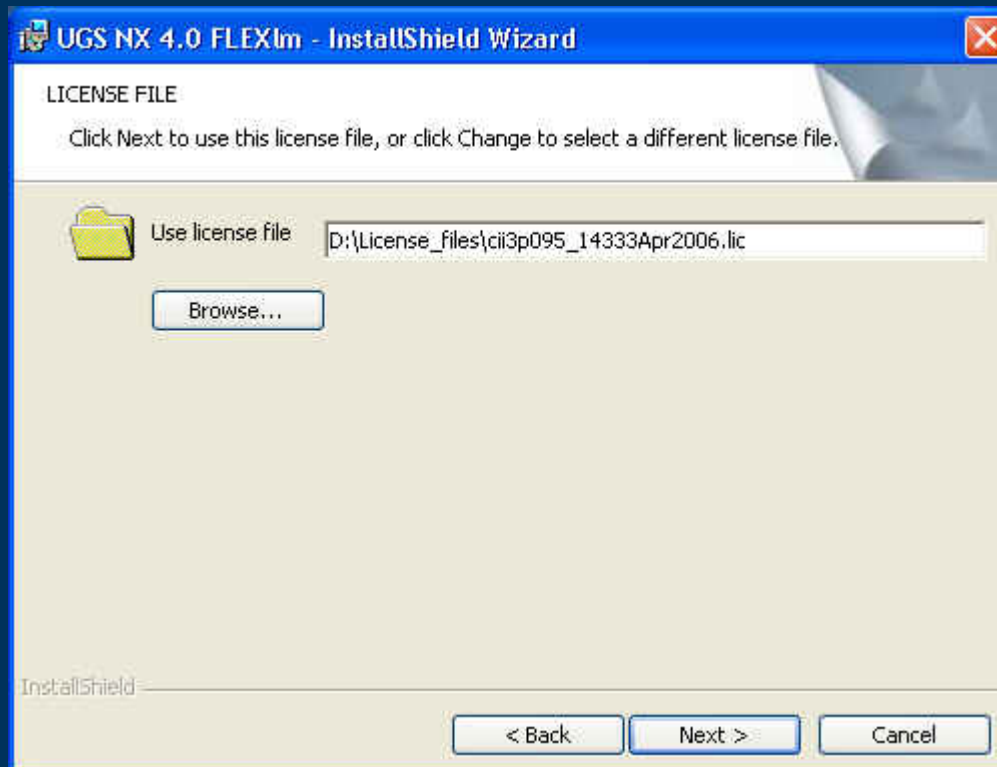




I-deas 12 License Configuration



- ▶ You will be prompted for the location of the license file. This will be the file that you received from your CSR or received as a download from the UGS web site. Add location here





I-deas 12 License Configuration



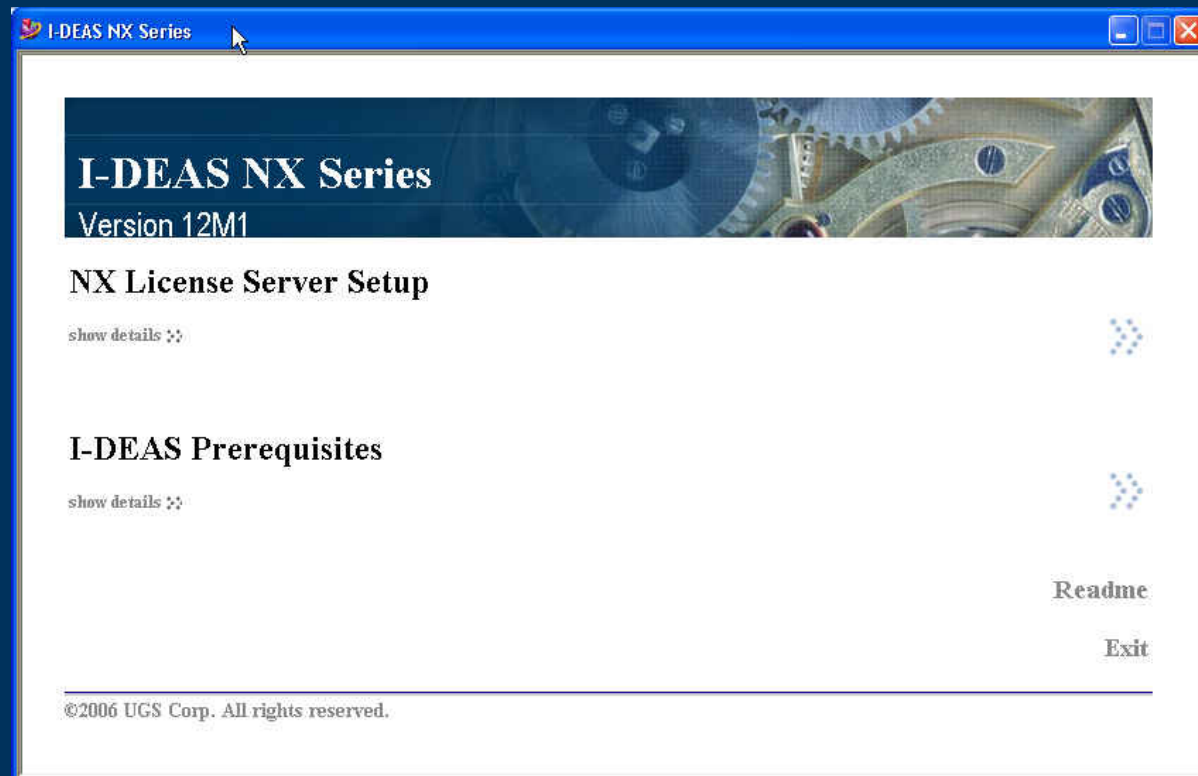
- ▶ Once the installation is complete the license service will be installed on the license server and the workstation can point to it for a license during their installation.



Installation Prerequisites



- ▶ Java and Orbix
 - ▶ These two prerequisites must be installed before the option to install the ideas code will be available.

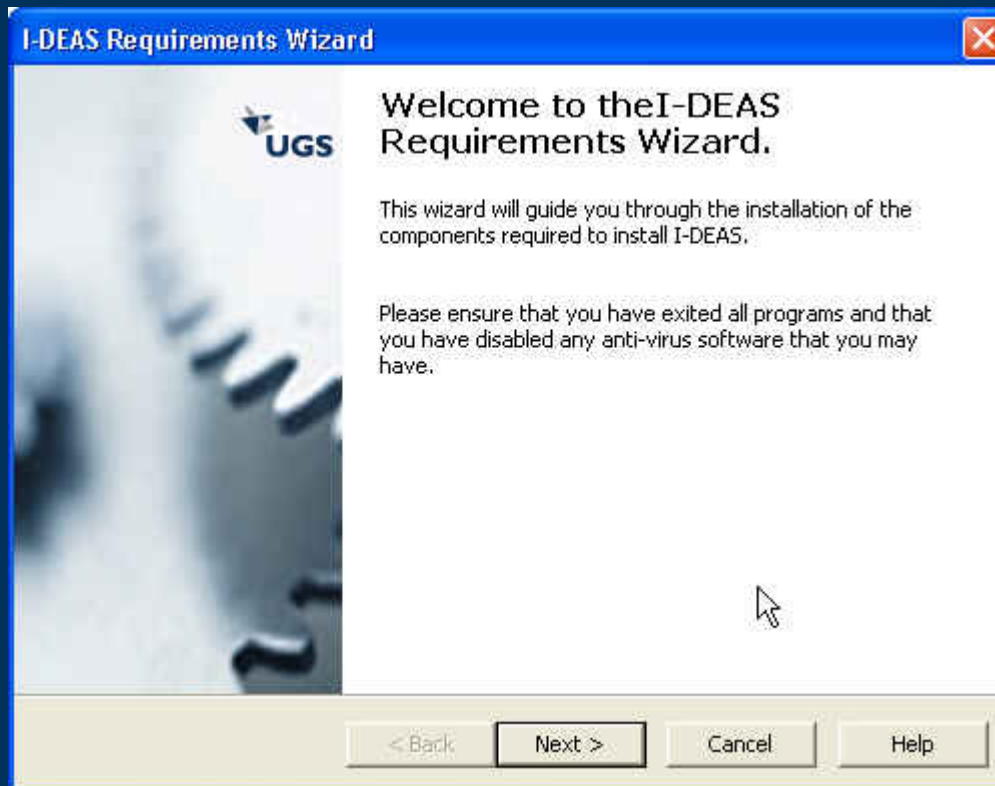




Installation Prerequisites



- ▶ When selecting the Ideas Prerequisites you will be given the installation wizard to start the process.

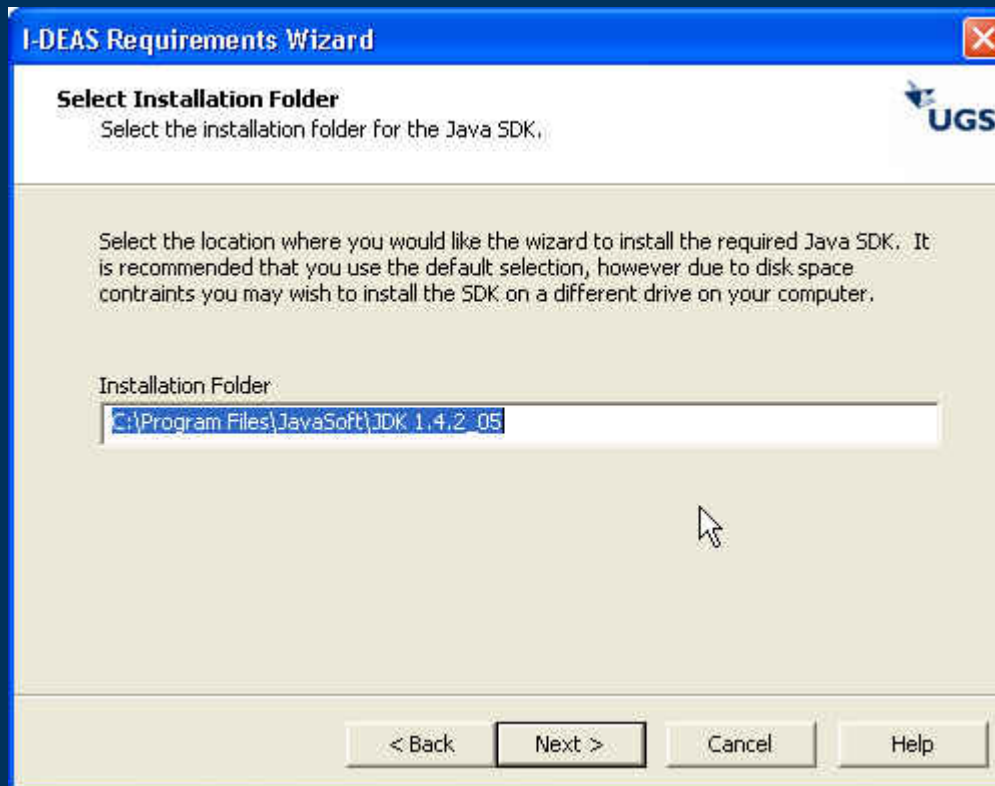




Installation Prerequisites



- The first prompt will be for the installation location of Java1.4 and will give the default location to install.

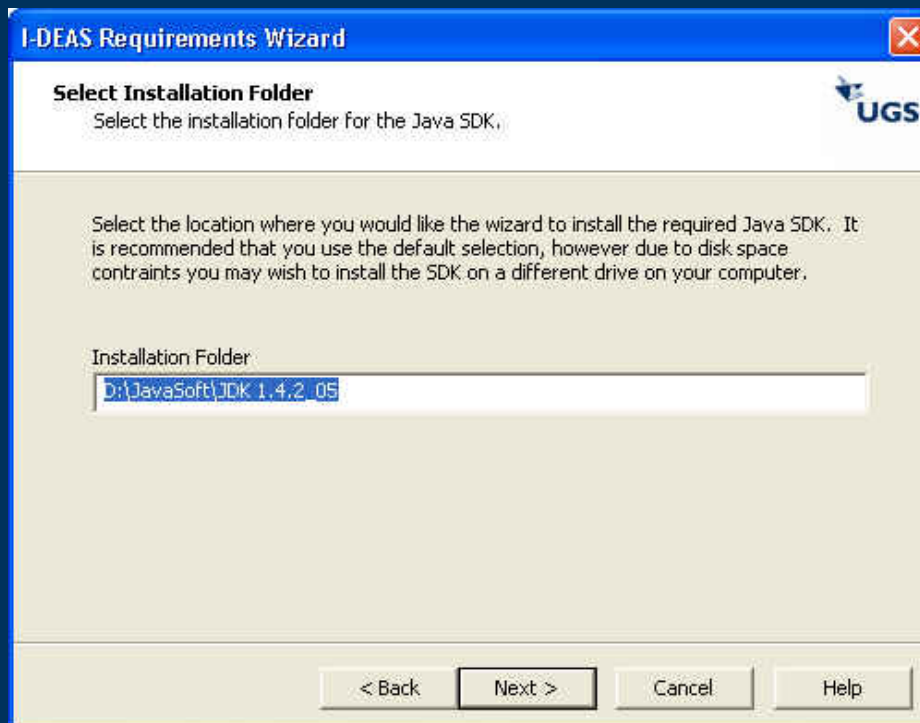




Installation Prerequisites



- To change this to a different location just modify the information in the box to point to your preferred location. The example below is moving the install to a different drive and a shorter path.

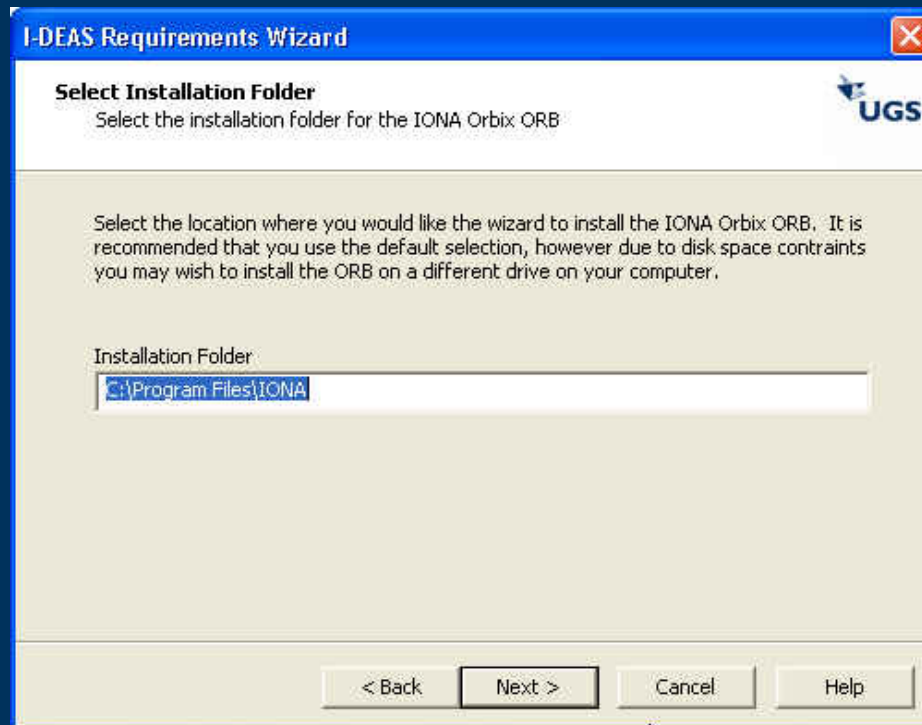




Installation Prerequisites



- ▶ Next you will be prompted for the installation location for Orbix. You can change this the same as you did for Java.





Installation Prerequisites



- The installation of Java and Orbix will launch and then you will see a dos window with some messages in it. This is adding some exceptions to the firewall and is working as designed.

```
D:\IONA\etc\OrbixE2AInstall.exe
Preparing to install the E2A ORB
Adding application to firewall exception list: IONA Configuration Repository
Adding application to firewall exception list: IONA Locator
Adding application to firewall exception list: IONA Naming
Adding application to firewall exception list: IONA Node Daemon
Adding application to firewall exception list: IONA itadmin
...
```



Installation Prerequisites



- After everything is complete you will be given a message that the installation was complete and to reboot your computer to start the Orbix services. You do not have to reboot at this time and can continue to complete the rest of the installation.





Different Installation Types



- ▶ There are three types of installations available with Ideas 12.
- ▶ Server, Workstation and Run From Network Drive
 - ▶ The Server installation would consist of the License server, Team Resource Lock server and Team Server. Generally the server is used as a server only and not as a workstation unless a complete install is done for a Standalone Workstation. This is done to prevent potential stoppage of the services or unavailability of the team. If this machine is also used as a workstation it could get rebooted and cause all connected machines to fail.



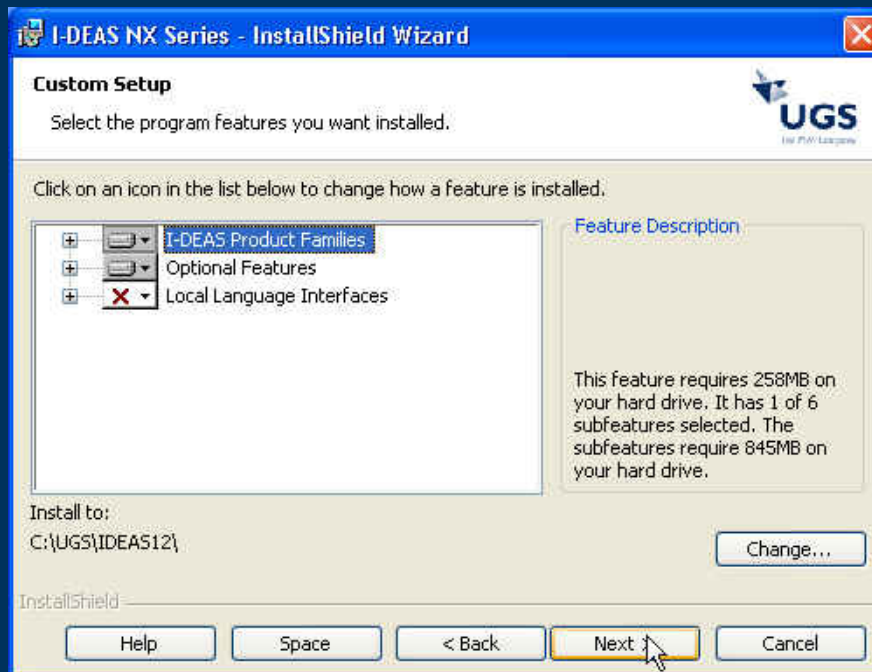
Different Installation Types



- ▶ The Workstation install can have everything installed if this is the only machine that is using ideas. This would then server the license, resource lock, & team in addition to having all of the code installed. If you have a single user license this would be the common setup.
- ▶ The Run from network Drive is an option where there is a complete code install on the server and it will be accessed from the workstation instead of installing all of the code on the local workstation. This is generally only used if the workstation is going to see very limited Ideas use since everything will be going across the network which does impact performance.



- The Ideas12 installation uses the Microsoft installer and will appear different than previous ideas versions when selecting the products to install. On the setup window you have the options of installing the code and changing the installation location of the code.

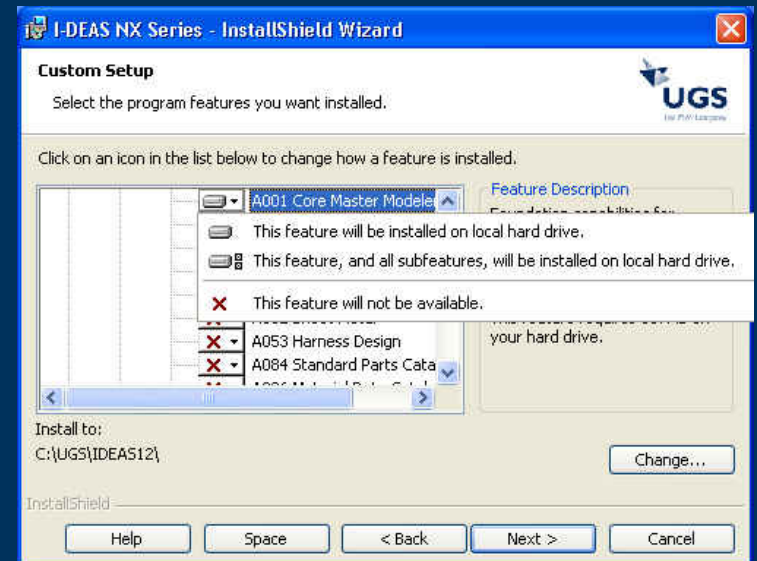
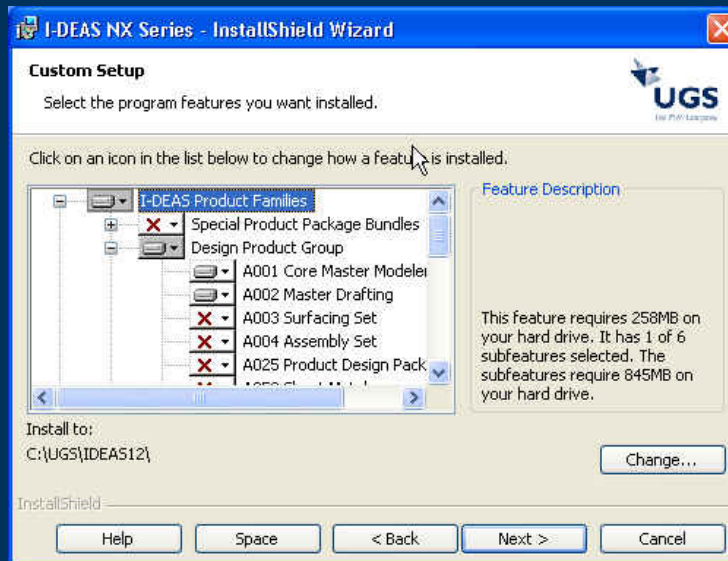




Ideas Installation



- ▶ The products can be expanded and selected when doing the installation. The two views below show a product selected and the option available under the drop down selection. You will want to select the products that you are licensed for from these windows.





- The license file that you receive should have all of your products listed at the bottom that you will need to install. You can install more products than what you are licensed for but you will only be able to run the ones that are licensed.

#	LICENSE	PRODUCT	QTY	DESCRIPTION	QTY	FEATURE	NAME
#							
#	A003		1	SurfacingSet	1	nx_freeform_1	
#					1	nx_freeform_2	
#	A007		1	ManufacturingSet	1	cam_base	
#					1	cavity_milling	
#					1	fix_axis_surf_mill	
#					1	graphical_tool_path	
#					1	planar_milling	
#					1	shop_doc	
#					1	std_ug_library	
#					1	surface_milling	
#					1	tol_cavity_milling	
#					1	ug_post_exe	
#					1	ug_post_mill	
#					1	ug_turning	
#	A180		1	MasterNotation	1	geometric_tol	
#	A300		1	ArtisanApplications	1	assemblies	
#					1	dotnet_runtime	
#					1	drafting	
#					1	dxfdwg	
#					1	features_modeling	
#					1	gateway	
#					1	iges	
#					1	nx_material_system	
#					1	pv_ugdatagenerator	
#					1	sla_3d_systems	
#					1	solid_modeling	
#					1	ug_collaborate	
#					1	ug_smart_models	
#					1	ugopen_menuscript	



Command Line Installation



- ▶ The silent install feature of previous ideas installations has been replaced with the Microsoft Command line installation. This will use the msi databases to install the different portions of Ideas. There are many different options that can be configured from the command line and are included in the documentation for Ideas 12. Below are several sample lines used to install ideas from the command line. These lines will install Java, Orbix and the Ideas code.
- ▶ `call msixec /i D:\code\Java\Java.msi INSTALLDIR=d:\ProgramFiles\Java ALLUSERS=1 /l* D:\code\Java\java_instl.log /qn`
- ▶ `call msixec /i D:\code\Orbix\Orbix.msi INSTALLDIR=d:\ProgramFiles\IONA /l* D:\code\orbix\orbix_instl.log /qn`
- ▶ `call msixec /i "D:\code\IDEAS\I386\I-DEAS NX Series.msi" INSTALLDIR=d:\test12\ DEFAULT_TDI=D:\Team12\Master\Config FLEXLM_PORT=27000 LICENSE_SERVER=CII3W201 SDRG_MPATHS=D:\IDEAS12\HELP STARTINDIR=D:\IDEAS12_FILES JAVA_HOME=d:\ProgramFiles\Java IT_PRODUCT_DIR=d:\ProgramFiles\IONA ALLUSERS=1 ADDDEFAULT=A001,A002,A003,A501 /l* D:\code\ideas\instl.log /qn`



Resource Lock Server



- ▶ Ideas 12 uses a separate resource lock server for the team data installation.
- ▶ This service should be run on the team server or the license server if they are different.
- ▶ If this service is not running you will not be able to get into ideas. The flexLM license finder will appear if the resource lock service is not running or specified correctly in the ideas_param12.dat file.
- ▶ There is a parameter in the ideas_param12.dat file that determines where the workstations look for the resource lock server.

Team.DflexlmConfiguration: 7621@CII3P095

If you receive the flexLM license finder you should check this parameter and verify that it is pointing to the license server and not to localhost.



Team setup with the TDI Wizard



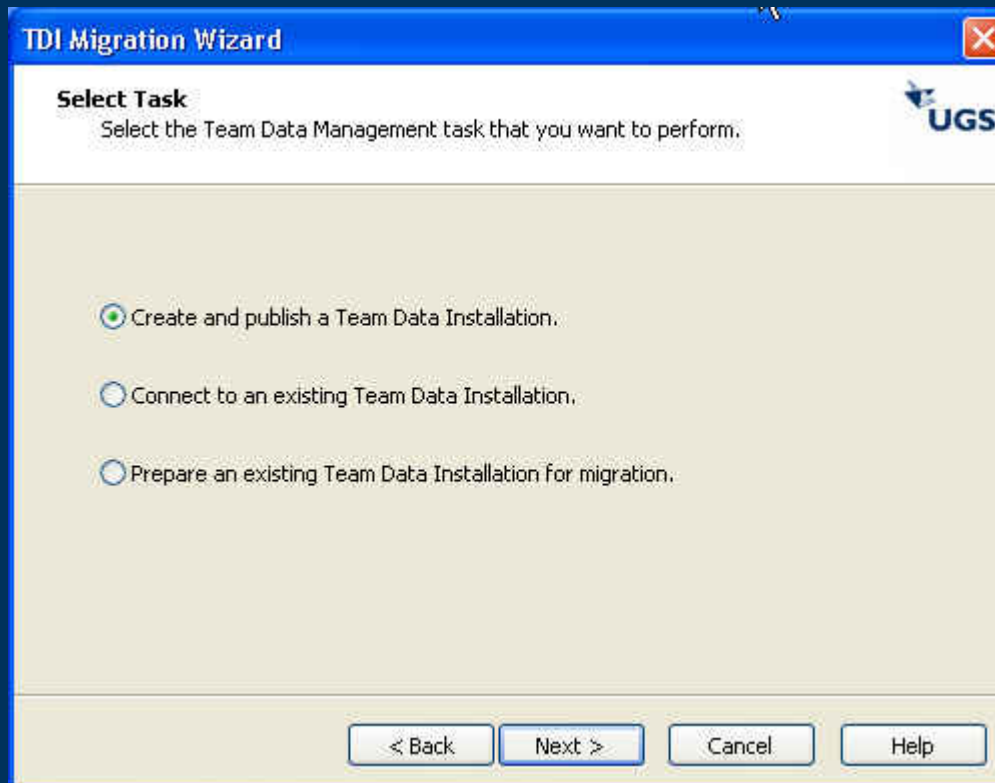
- ▶ The team can be setup from the server using the TDI Wizard if at least one ideas product is installed on the server. If the TDI Wizard is run on the server it will create the team structure, install the resource lock service and add the correct entry to the ideas_param12.dat file. To install just the resource lock service on the server you can run the E:\ResLock\ResourceLocking.msi from the DVD.
- ▶ If the TDI wizard is run on the workstation to setup the team you will need to edit the ideas_param12.dat file and correct the resource lock entry to point to the resource lock server.
- ▶ Change:
- ▶ Team.DflexImConfiguration: 7621 @workstation
- ▶ to
- ▶ Team.DflexImConfiguration: 7621 @CII3P095



Team setup with the TDI Wizard



- ▶ The initial screen of the TDI Wizard has three options. If only the middle option is available to you, you do not have local administrative rights to add the resource lock service. You will need to get local rights to be able to Create and Publish or Prepare an existing team for migration.





Team setup with the TDI Wizard



- ▶ Create and Publish a team data installation is for setting up a new team. Be sure to use a drive letter that all machine can map to as the same drive letter.
- ▶ Connect to an existing team data installation is for connecting a workstation to an existing team or switching to a different team that is already setup.
- ▶ Prepare an existing team for migration will take an Ideas11 or earlier team and create an ideas_param12.dat file so dmadm can be run on the team to migrate it to Ideas 12. If this option is used the variable for the resource locking will need to be set correctly in the ideas_param12.dat file. It will initially appear as:

Team.DflexlmConfiguration: 7621 @localhost

and should be changed to point to the resource lock server.

Team.DflexlmConfiguration: 7621 @CII3P095



License borrowing with Ideas12m1



- ▶ With Ideas12m1 using a new version of FlexLM “License borrowing” is available.
- ▶ This will replace the “Take Home License” that was available in previous Ideas releases.
- ▶ The license borrowing feature will checkout a license and remove it from the server pool. It does not just give you extra licenses like the take home license did.
- ▶ To enable the license borrowing you must have product NX21001 added to your site ID and a new license file generated.
- ▶ Access the license borrowing by using the “Licensing Tool” under the Ideas12 selection under “All Programs”.
- ▶ Check out the license for only as long as you will need it. There is a problem with flex that will not allow bundles to be returned early.



► How to Borrow Licenses

- Make sure that UGII_LICENSE_FILE environment variable points to a valid license server and the machine is connected to the network.
- Run Start → All Programs → I-deas12 → Licensing Tool
- On the Borrowing Selection tab:
- Click Borrow License(s).
- Enter a return date and a return time. The default date is one week from the current date. (The date can be no more than three months from the current date.)
- Double click each of the license modules and/or bundles you wish to borrow.
- Click OK.



▶ Running with Borrowed Licenses

- ▶ Set an environment variable IDEAS_BORROW=1.
- ▶ Make sure that the ideas_param12.dat file contains a negative Team.MasterID (single user mode). You will be using a local team install on this machine. To move any data back to the other team you will need to use a package file and import the library data once you are back on the main network with the network license and network team.



- ▶ There are now 3 options for memory settings in Ideas12m1
 - ▶ Auto Memory Tuning
 - ▶ This is the default when ideas is installed and it will attempt to adjust the memory to best fit the hardware.
 - ▶ Manual Memory Tuning
 - ▶ This option will allow you to adjust the memory for specific functions that you are attempting to do with Ideas.



Memory Settings for Ideas12m1



- ▶ LAA Memory Mode
 - ▶ Large Address Aware (LAA) memory mode will take advantage of more system resources. This mode requires that the operating system be able to handle the large memory allocation. LAA mode provides access to extended memory resources greater than 2GB on platforms that support it (Windows XP x32, Windows XP x64, Sun Solaris, and HP-UX). Access to larger amounts of RAM (particularly greater than 2GB) can improve throughput in areas where process swapping/paging issues limit performance. LAA mode lets you create, interact with, and display very large models in I-DEAS.
 - ▶ LAA mode access to memory resources greater than 2GB is available for the Design, Simulation, and I-DEAS Archive Import/Export applications.
 - ▶ To enable LAA mode set the memory tuning parameter entry in the user parameter file:
 - ▶ `Memory.AutoSetting: 2`



Removing Ideas12 or the prerequisites



- ▶ With the usage of the Microsoft installer all products that are installed can be removed using the Add/Remove Programs option from the Control Panel.
 - ▶ You will see these products listed:
 - ▶ I-deas NX Series
 - ▶ I-deas Help Library
 - ▶ I-deas Resource Locking Service
 - ▶ I-deas SFAM Component
 - ▶ Java 2 SDK, SE v1.4.2_05
 - ▶ Orbix
 - ▶ UGS NX 4.0 FLEXlm



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